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AGRICULTURAL EXPERIMENT STATION

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UNIVERSITY FARM SCHOOL

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COMMUNITY OR LOCAL EXTENSION WORK BY THE
HIGH SCHOOL AGRICULTURAL DEPARTMENT.

By W. G. HUMMEL.

A type of work connected with agricultural instruction in high schools which is receiving increasing attention from persons interested in the promotion of agricultural education is that of local extension or community work. By this is meant work for the agricultural communities surrounding the schools—for the men and women on the farms, for the farm boys and girls not in school, for townspeople interested in agriculture or agricultural products and for the general promotion of agricultural knowledge and prosperity in the community.

It aims to connect school life with the home life of the community, to bring school instruction in touch with local farm practice, to bring to the attention of adults interested in agriculture any discoveries or practices of scientific agriculture the application of which would be beneficial locally, to unite the agricultural interests of the community, to add zest to country living, and, in short, to promote in any way possible better methods of work, greater profits, and contentment and happiness for farm people.

The fact that the school and its life and work should be more closely connected with the life of the community than has been the case in the past is becoming almost universally recognized. Publications on "the school as a civic center," "the school as a social center," "the unification of the community through the school," and the like, are becoming numerous. The programs of teachers' associations and educational conventions show evidence of the thought and discussion being given to this problem.

In some communities the only attempt to relate school and home more closely is by the opening of the school building to the people of the community for social events, club meetings, etc. In such cases the teachers of the school frequently have no interest in the meetings and do not attend them. The school building serves the community for

more than one purpose, and a desirable community spirit may be fostered. But the school and its life is not intimately related to the life or work of the community. There is no vital connecting link between the life and work of the community and that of the school.

In other communities, however, it is felt that the opening of the school to the people for any legitimate purposes not interfering with the school work is not enough. It is believed that the teachers, the supposed educational leaders of the community, should extend their services outside the schoolroom and school hours for the education or social good of the community employing them.

Advantages and opportunities of local extension work in agriculture.

There is opportunity for every department of the school to take a part in this community or local extension work in one way or another, if desired. But while each department may contribute something to the life of the community and in return receive community interest and support, it is through the vocational departments—agriculture, home economics, and manual training—that the most far-reaching, most intimate, and most helpful relations can be established. While a few people are interested in history, botany, and art, practically all are interested to a greater or less degree in the basic occupations of the world, particularly agriculture and home economics. The spread of better methods in agriculture and home economics affects every family, directly or indirectly. Increased agricultural prosperity means increased prosperity throughout the nation.

Important as are other lines of community work, it is our purpose in this circular to discuss only the community or local extension work which may profitably be carried on by the high school agricultural department. The needs, possibilities, and demand for this form of high school community work are, it is believed, greater than for any other. Its benefits are more widely extended. Properly carried on, they should extend to the community, to the local school, and to the agricultural experiment station. They should reach the purse, the mind, and the spirit. They should bring increased knowledge, added profits, and greater contentment and happiness to farm people. To the agricultural teacher, local extension work offers an opportunity for acquiring an intimate knowledge of local agricultural conditions and needs which will be of great value to him in his school work. It emphasizes the value of school instruction in agriculture in the minds of pupils. It paves the way for profitable class field trips and excursions to local farms and secures the interest and co-operation of intelligent farmers of the community in the school work. And, finally, local extension work forms a connecting link between the state agricultural college and the school, and between the college and the farming population, which is of benefit to all three.

The college is doing notable investigational work along agricultural lines. It has agricultural experts who are giving their time and efforts to the study of farming problems. It publishes bulletins recording the results of their investigations and study. Yet these bulletins reach but comparatively few of the farming population. Moreover, some of the bulletins are too technical for the average farmer. Even when they are popularly written, individual farmers sometimes fail to understand how to apply the methods outlined to their particular conditions.

The extension division of the college endeavors to take the results of investigational work to the farmers at farmers' institutes and by means of the demonstration train. But not all farmers are reached in this way. Only a limited number of topics can be treated at the institutes of a given locality. It is frequently difficult for institute workers to answer questions of farmers as to individual problems without a visit to the farm in question. And this visit it is often impossible to arrange.

The college conducts short courses; but only a few farm boys and girls, or adult farmers, find it possible to attend them. The agricultural education division of the college conducts correspondence courses, and many farmers are taking advantage of them. But a great number are not reached in this way. And among these are many of those who need help most.

Moreover, farmers in every community have individual problems constantly coming up. These are often not touched upon by the college workers through any of the agencies mentioned; or, if taken up at the institutes, etc., it is often at so distant a time that the farmer does not get help when he needs it and would use it. It is true that all workers at the college are glad to answer questions as to individual problems, but many farmers, for one reason or another, do not write to the college.

So it is found that a large number of persons interested in agriculture are best, or only, reached through the effort of a local person of broad agricultural knowledge, interested in and familiar with agricultural conditions throughout the district, and constantly on the alert for practices or ideas promising increased agricultural prosperity to the community.

It may be said that for just this reason county agricultural demonstrators or advisors are being appointed in many localities. That these men are doing and will continue to do valuable work for the farmers of their respective counties, there is no doubt. But some counties are as large as the smaller states. The extension field still frequently remains so large that it is only at long intervals that the county advisor can get in touch with individual farmers. His work and time is divided among many communities.

On the other hand, the teacher of agriculture in the high school, if properly prepared for his work, is in an ideal position to carry on work for the agricultural welfare and progress of the individual community. He has the opportunity, through local extension work, to deal directly with farming people, while the college is usually compelled to work for them at a distance. He is in the community, "on the job," every day. The county advisor can be there only at more or less infrequent intervals. The agricultural teacher is able to make himself, through continuous association, the farmer's friend and confidant. This close association is impossible for the college workers. It comes slowly for the county advisor. And, as has been said, the county advisor is not always at hand. Yet it means much, for farmers as a class do not express themselves or discuss their problems freely without close acquaintanceship.

But the agricultural teacher not only has an *opportunity* to do valuable community work; it is a part of his *duty* to make himself a vital factor in promoting better agriculture and happier country living throughout the community employing him. He should not only be able to give good counsel and advice when asked, but should so familiarize himself with farming conditions and so identify himself with agricultural interests that farmers will bring him their problems and heed his advice. He should give them confidence that he will personally do for them what he can; and that questions which he does not feel competent to answer he will take for them to some agricultural expert especially fitted to do so.

The high school agricultural teacher should feel obligated to carry on more or less local extension work, not only because of his duty to the community and to the school, but because he owes a duty to the state agricultural college and experiment station. He owes this duty whether he received his education there or not. The state agricultural college represents the highest plane in agricultural education in the State. The high school agricultural department is but a middle link in the scheme of public education in agriculture. The high school agricultural teacher should feel that he owes to the elementary agricultural work of the grades and to the advanced work of the agricultural college whatever he can give. He can give to the college, through community work, valuable co-operation in its extension work and useful information as to local agricultural problems.

Workers at the agricultural college and experiment station are desirous of using their time and effort to the best advantage in solving the problems of the farmers of the State. They want the greatest possible familiarity with agricultural conditions and needs. They want immediate information as to new farm pests, troublesome diseases, new

varieties of plants and animals, etc. Frequently it is difficult for them to secure this information at the time when it would be most useful, because farmers do not recognize conditions which should be looked into, do not know whom to inform, or delay calling attention to the facts until it is difficult to apply corrective measures.

The high school agricultural teacher doing local extension work is in a most favorable position to watch conditions and detect needs and to pass on useful information concerning them to the college. When his interest is apparent, all kinds of local agricultural information, of big and little importance, will come to him. It will come to him through his visits to farms, from the farmers, and from his pupils. No one has an opportunity for more intimate agricultural knowledge of the community than he.

Where there is no county agricultural advisor, the agricultural teacher should exert a double vigilance in his extension work and should keep in close touch with the extension division of the state agricultural college as well as with its agricultural education division. Where there is a county advisor his relations with the extension division of the college will naturally be somewhat more remote, co-operation with the county advisor taking its place.

Teachers of other than vocational subjects frequently find it difficult to do helpful community work connected with their special subjects even when they so desire. There is a lack of interest on which to base their endeavors. But the teacher of agriculture is usually fortunate in having a ready made interest.

High schools teaching agriculture are, naturally, located in towns, cities, or rural communities where large numbers of students are drawn from the farming population or where the prosperity of the high school community is largely dependent upon agriculture. It is for schools so located that agricultural instruction has come to be recognized as a right and a necessity. A large part of the population in such communities has not only a general interest in agriculture, but a direct interest, given impetus by the fact that the industry supports a large proportion of its people.

The field for local extension work is undoubtedly a broad one. Many avenues for community work are open to the high school teacher of agriculture. Many kinds have been successfully carried on in various parts of the country. However, hitherto the agricultural teacher has had little in the way of guidance in the work. Individual teachers in various states who have recognized the need and advantages of the work have attempted to carry it on. In a few states where state aid is given to agricultural instruction in the public high schools, a certain amount of community work is required of the agricultural teacher by law. But

because teachers have not known what other agricultural teachers have attempted in the way of community work, their successes and their failures, the difficulties and problems of the work, some teachers hesitate to begin such work even though they feel its value. Others attempt the work but make such serious mistakes in their methods that their efforts do little if any good. They may even be harmful.

It therefore seemed wise, before preparing this circular, to conduct an investigation with regard to what has actually been done by agricultural teachers in high schools, and by teachers in rural consolidated schools of secondary grade, in the way of local work for the improvement of agricultural conditions in their respective communities.

Letters and questionnaires were sent to a large number of agricultural teachers in secondary schools scattered throughout the United States, in the endeavor to gather opinions and facts embodying the results of experience in local agricultural extension work. Teachers were asked to tell, first, of any and all ways in which local farmers have been directly helped and in which benefit has resulted to the agricultural interests of the community through the agricultural department of high schools in which they have taught or are now teaching. An expression of opinion with regard to the following and similar questions was also asked:

What kinds of local community work can be successfully carried on by the agricultural teacher in the ordinary public high school where agriculture is taught? What seem the most promising lines of community work which can be undertaken by the agricultural teacher in the high school for the adult farmers of the surrounding community? For the boys and girls not attending school (over school age)? For the farm women of the community? For teachers in the small rural schools of the surrounding districts?

What provision as to money for carrying on such work should be made? Should the support of such work come entirely from the school board? If not, from what sources should it come? What arrangements should be made as to the time available for the teacher to plan and carry on such work?

As a result of the investigation a quantity of valuable material was received, much of which was accompanied by illustrative photographs. This material forms the basis of much of this circular. The conclusions reached and the recommendations made are therefore not untried and problematic. They represent, in composite, opinions formed and experience gained in such work in many schools and in many states. Actual experiences and results are chronicled.

Arrangement as to time available for the teacher to carry on community work.

It is evident that an expenditure of considerable time will be necessary if the agricultural teacher is to do effective local extension work.

It takes time to become familiar with needs and conditions, to get to and from farms, to plan lines of endeavor, and to carry them on.

The teacher can not be expected to teach as many hours during each school day as do teachers in other high school departments and in addition carry on community work. Even though every department of the high school takes its part in community work, more time should be allowed the agricultural teacher than others for the work because of the special and excessive demands in his work and the time required to meet them. If the agricultural teacher has only Saturdays and after school hours for community work, he will be overburdened and both school and community work will suffer.

It is clearly desirable that there be a suitable and definite allowance of time for extension work. If agricultural classes are so arranged that the instructor's free time can be economically and effectively utilized for the work, it will be of great advantage.

In reply to the question as to what arrangements should be made as to time available for the teacher to plan and carry on the work, correspondents were, in general, of like opinion.

They agreed that the agricultural teacher doing community or local extension work should not be asked to teach any subjects other than agriculture (as botany, chemistry, etc.), and that his class work should be so arranged as to leave him a certain amount of time free for getting out to farms, studying local conditions, helping solve farm problems, and the like. By the majority of correspondents it is considered advisable that one half of each school day, preferably the morning, be given to class work and the other left free for preparation for laboratory work, school farm work, and community work, except when short courses are being conducted in addition to the regular school work. In any case, a definite amount of free time weekly should be arranged for the work. Many express the opinion that the high school agricultural teacher should be hired for twelve months, a vacation of one month being arranged for at the most convenient time. In this case it is agreed that he may do much of his extension work during school vacations, though he should still be allowed a definite part of his time during the school year for this purpose and should continue his efforts at all seasons.

Financial support of agricultural community work.

With regard to support for the work, it is generally agreed that there should be legislation providing for state aid to public high schools maintaining agricultural departments, and that a part of the support of the local extension work should come from this source. It is also agreed that the local high school board should bear a part of the expenses. That the farmers of the community, to whom a great part of the ben-

efits of local extension work come, should contribute to its support, is unquestioned. Yet it is conceded that their help can not be looked for or depended upon to any great extent in starting the work. They must first be convinced, by results, of its value to them.

Local extension work in connection with high school agricultural teaching has undoubtedly proved most successful in those states where it receives state aid, yet it is being carried on very helpfully in states where it has only local support. Sometimes this local support comes entirely from the local high school board, sometimes it comes partially from progressive business men of the locality, and sometimes it is secured partly from the farmers, after they are convinced of the benefits of the work.

Financial support for the work is needed in order that a suitable conveyance may be provided for the agricultural teacher, to facilitate getting around the community and visiting farms. Money is frequently needed for apparatus, as Babcock testers, for the printing of brief farm bulletins, short course announcements and the like, and for various other purposes. Yet no high school agricultural teacher, in whatever state or locality, should be discouraged because of lack of funds for the work. Even where the school principal and the school board do not favor extension work by allowing either time or money for it, much can be done by a tactful man who has a real knowledge of the community and interest in its rural needs and welfare. He may still make a beginning in the work, winning gradually the encouragement and assistance of the principal and school board by proofs of its value and usefulness. No teacher is justified in antagonizing his principal or school board by engaging in community work of which they do not approve. But there is no doubt that a tactful teacher can find ways in which to make a start in local extension work which will neither require an expenditure of money, an excess of his time, or arouse opposition from the school authorities.

State aid for vocational departments in the public high schools is greatly to be desired and legislation to that end is being enacted in many states. Every agricultural teacher should do his share in educating the people of the State to its final necessity. Yet it is not, as has been indicated, absolutely essential before a start can be made in helpful community work. It should be a goal toward which persons interested in the promotion of agricultural education should work in every state where it has not been secured, but its present lack should not, in any case, prevent work toward the ideal educational service which it is intended to make possible.

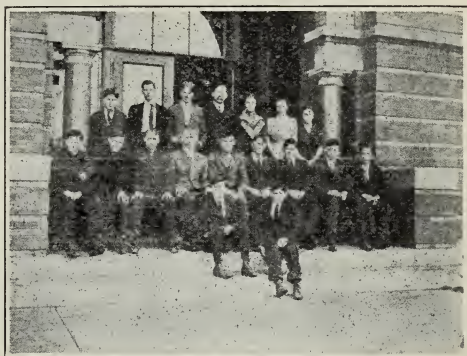
Forms of agricultural community work.

The kinds of community work which may be successfully undertaken are many, as has been said. They may be roughly classified under five

heads: (1) work with farmers, as organizing or working in farmers' clubs, an annual "farmers' week" of agricultural lectures, field and orchard demonstrations, co-operative experiments on farms, good seed distribution, seed and milk testing, preparing plans for buildings, and selecting and purchasing improved livestock, etc.; (2) work with farm women, as afternoon or evening meetings, short courses, and home garden and poultry experiments; (3) work with young people, as short courses in agriculture and home economics, agricultural contests, and literary societies; (4) work with rural school teachers, as meetings for agricultural instruction, assisting in conducting school fairs and rallies, and outline lessons in agriculture and home economics; and (5) work with rural school children, as boys' and girls' agricultural or domestic science clubs, school house "fairs" or exhibits of work, rural improvement and athletic field days.

Many kinds of community work included in each of these classes has been carried on in various parts of the country by high school agricultural teachers. In no one community would it be possible or desirable to carry on all the forms of service which have been found helpful. The work to be undertaken in any given locality depends, naturally, on what the com-

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Announcement of Short Course in Agriculture at Anoka (Minn.) High School.

munity most needs and desires, and on the time and resources available for the work. But something can be done in every community where the high school has an agricultural department. And, if possible, it is usually desirable that some form of work be done for each of the classes mentioned above.

What high schools have accomplished in agricultural community work.

A clear understanding of the aims and values of agricultural community or local extension work in connection with high school agricultural instruction is necessary for the well informed

teacher of agriculture in secondary schools at the present time. Knowledge of the forms of community work which may be undertaken and which promise the best results should be a part of such a teacher's mental equipment. But most helpful of all will be an acquaintance with what other high school agricultural teachers have actually achieved along these lines, and their methods of work. We, therefore, quote below from a few of several hundred interesting letters from teachers describing community work carried on by them. The limits of this circular make it possible to give only brief extracts from the letters selected. These are not always the most human and interesting, but it is believed that they are fairly representative. In choosing them, non-duplication of statements and conciseness in expression

Canby State High School

Department of Agriculture

FARM FACTS

Bulletin No. 3

ALFALFA

IN THE INTEREST OF ALL OUR LIVESTOCK
THE DAIRY THE HOG

By EDWIN S. BILLINGS

Director Department of Agriculture

The Canby High School Offers Long and Short Courses in Agriculture, Woodwork, Domestic Science. For particulars address Supt. Sidney C. Huffman or Mr E. S. Billings.

ISSUED FEBRUARY 1912

Cover of five-page bulletin on alfalfa issued by the agricultural department of the Canby (Minn.) High School. At the end of the bulletin is the following note: "If this little bulletin does not answer all your questions in regard to alfalfa, ask more. We are here to answer them as far as we are able. Make your wants known."

were determining factors as well as the account of the work done.

"Last year we held a hog cholera serum demonstration which was attended by many farmers from about the country.

"The preceding season was a very hard time to get seed corn which would grow. Many farmers had no seed and did not know where to get it. The school shipped in a carload of reliable seed corn and sold

this out at cost to farmers. This was all pedigreed corn and as a result two thousand acres of good well-bred corn grew around Canby last year.

"Farmers brought in hundreds of bushels of corn for testing and the school did this either free or at cost.

"We issue a school bulletin on timely topics every now and then and this goes to farmers all about the country. There is always more to do than one man can attend to. Calls all through the year to go and see sick hogs, look at diseased grain or trees or show a man how to make Bordeaux mixture."—EDWIN S. BILLINGS, Canby (Minn.) High School.

"We are now striving to organize a cow testing association, and have been testing and keeping records of ten herds for more than a year. We make the work as easy as possible for the farmers to begin with. We furnish each with milk scales, milk sheet and bottles. All we ask of them is to record the weight of morning's and evening's milk, to feed a ration balanced by us, and to give us a record of milk and feed for each month. They send us samples of milk once a month and we in turn send them a detailed monthly statement of the records of individual cows. Those people who have been doing this kind of work will not return to the hit or miss method. They buy the scale and are glad to do the extra work. It is just a matter of time when we will have a co-operative testing association.

"We are about to perfect a horse breeders' association. Will have a Holstein breeders' association soon. We reach many farmers by testing and selecting corn and other grains for them. We aid them in buying pure bred sires and dairy cattle and hogs. We aid in drainage work. We are disseminating seeds acclimated on the school farm, and also introducing alfalfa into the community. New barns are being planned, concrete silos introduced. Co-operation in the several lines is receiving attention. Thus far we have succeeded in securing a co-operative creamery and elevator."—L. H. THUERWACHTER, Kasson (Minn.) High School.

"Our extension work is devoted largely to the distribution of pure bred seeds among the farmers. We have twenty acres of cultivated land upon which we expect to raise pure bred and well selected seed corn, seed potatoes and small grains.

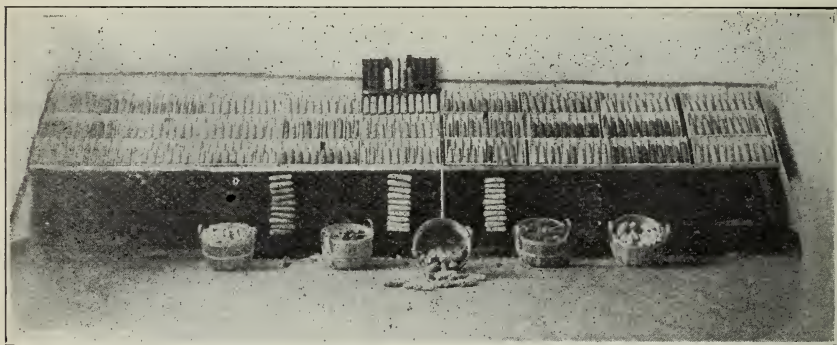
"We are advocating the individual ear test for corn and are testing corn free of charge for all farmers who bring it in.

"We are running demonstration plots in connection with our school farm. This year we have seven alfalfa plots in our community."—J. S. KLINKA, Little Falls (Minn.) High School.

"My work with farmers consists of testing seeds both for purity and germination, testing milk and dairy products, testing individual cows in dairy herds, selecting seeds, pruning, grafting and orchard management, including spraying. In fact, I never can tell what is to be the next problem that will come up. I have had one farmer send in the head of a chicken which had died. He wanted to know what was the matter with it. The same day a farmer sent in two ears of corn, asking if they were the kind for this section. I made visits to both of these places, helping one man to select seed and urging more sanitary methods for the chicken man. I go out to the rural schools and give talks and assist in organizing farmers' clubs. We have also worked up a good county industrial contest and many local contests.

“We hold a three months’ short course for boys over fourteen years of age during the winter months.”—JOHN SWENEHART, JR., Jordan (Minn.) High School.

“We organize farmers’ clubs, the meetings of which are held in the rural schoolhouses of the county. We work in co-operation with the rural teacher. We get her to announce a meeting and get all of the farmers possible in the district to attend. One or more of the high school faculty go out and discuss some of the most important farm questions with the farmers. We have held about twenty-five of these meetings during the past winter and feel that we have been quite successful. It is best, if possible, to have the school children sing a few songs or something of the kind. Sometimes the meeting is held in connection with a basket social. Anything to attract the farmers and their wives. The



Corn exhibit, Long Prairie (Minn.) High School.

subjects that are discussed vary with the district. They should always be chosen to suit the needs of the particular locality. We have been giving special emphasis to dairying and corn growing and co-operation.

“We have organized a corn breeders’ association. Each farmer is to plant at least one quarter acre of corn by the ‘ear to the row’ method. The object is to improve the quality of the seed corn in the locality. The farmers are finding great difficulty in getting a strain of corn that will mature and do well in this cold climate. The high school is working to keep up the enthusiasm in the association. We keep records of the plots and shall put them in bulletin form.

“Recently we have been trying to get the farmers interested in keeping records of their dairy herds. In this we have been quite successful. The farmer weighs up the milk from each cow every day. I visit the herd once a month and weigh the feed and make an estimate of it for the month. A test of the milk is also taken. In this way the cost of production is figured out fairly accurately. I keep all of the final records and will publish them in bulletin form at the end of the year. I am very enthusiastic over this work and believe that it will be very helpful to the dairy farmers.”—EARL KILPATRICK, Long Prairie (Minn.) High School.

“The kinds of local community work undertaken here are:

(a) A ten acre demonstration plot operated in connection with the school where variety tests are being made and rotations worked out.

(b) Extension work by agricultural instructor and superintendent of schools in rural schoolhouses, afternoon meetings for school children and evening meetings for older people and farmers.

(c) A one week's short course for farmers and older boys not in school and also for farm women.

(d) Keeping of dairy records and making tests for dairymen.

(e) Talks on teaching elementary agriculture for rural teachers at teachers' associations.

(f) This summer seven agricultural projects are to be carried on in connection with state agricultural college. High school agricultural instructor to visit each of the seven demonstration farms once every two weeks, to direct the work."—J. S. JONES, Mora (Minn.) High School.

"We have had the agricultural work at Wells four years and I have had charge of it during that time. I mention this because in a community such as we have here the personal element is the main thing in extension work, and with Polish and German people it takes a long time to really get acquainted. A man a year would accomplish nothing. Some of the men will do things for themselves simply to accommodate me, their friend, when any amount of talking and demonstration might not help. In this state at the present time the agricultural men are changing too much and school boards would do well to require long time contracts.

"A fortunate thing helped me to win the confidence of my Polish friends. A farm two and one half miles away had been abandoned for about seven years and was grown up to milkweed and quackgrass, and the rest was slough. I purchased this personally and contrary to the prediction of the 'natives' it is now a clean, prosperous farm, and one worthy of their respect. It has done more than all the talking four men could do and all these Polish farmers go out of their way to pass by it and see what is going on."—H. C. WOODWORTH, Wells (Minn.) High School.

"I have had a demonstration meeting in which pruning, spraying, and setting trees was the subject. One man, for instance, had been trimming his cherry trees too severely and when he changed his methods by the advice of the demonstrator had better success. I demonstrated testing soils for acidity and received samples of soils which I tested. Some of these soils I found to be acid and told them to apply lime and they had good results. One man was about to buy 30 tons of lime to apply on his soil. I found this soil was alkaline and no lime needed. I also demonstrated several methods of inoculating alfalfa, and as a result twenty farmers are going to raise alfalfa. Each farmer will be visited, his soil tested for him, the field selected, and advice given until the crop is well started. I have also four boys who are going to start raising alfalfa under my supervision.

"A project which I am planning is home demonstration for boys. I plan to get them to raising corn and potatoes or fruit in their fathers' fields, and by better cultural methods to surpass their fathers as producers. It has been found difficult to give the city boys much to do, so it was decided to start prizes for the best vegetable garden and the

best, most artistic landscape work around the home. We are fortunate in having some fine parks. Some advice was given in regard to improvement which aided materially in bettering their conditions.



Spraying Demonstration. Meeting for farmers, held under the direction of the Agricultural Department of the South Haven (Mich.) High School. Professor O. K. White, of the Michigan Agricultural College, spraying.



Farmers in attendance at a demonstration meeting held under the direction of the Agricultural Department of the South Haven (Mich.) High School.

“In order to make the influence of the high school felt I go out to the country schools and give some help to the teachers who are teaching

agriculture in the eighth grade, lectures on seed testing, corn raising, and home improvement being given. I have never told the farmer he needs the agricultural knowledge, but have visited with him and talked over his work and troubles. This is where the half day off is valuable. This seems to me to be the proper way in which the farmer may keep his self respect and you yours in his sight. Make him feel that he wants it, not that we feel he is ignorant, needs it, and we must force it on him to make him get it.

"This summer I am planning the formation of more alfalfa clubs, corn and potato clubs, to stimulate interest. We are planning to make soil tests, investigate the drainage of the farm and in certain cases will suggest a new rotation of crops. Country home improvement, especially along the lines of sewage disposal, location of barns and fences, will also be taken up. We are now giving demonstrations for raising alfalfa, selecting of plots or fields, fruit spraying, thinning of fruit, insect control, and packing.

"We have a horticultural society which meets every two weeks. We discuss various problems, such as farm accounting, marketing of fruit, packing, spraying, drainage and acid soils. We induced men to come from Chicago, who were buyers of fruit, to give their demands and what the people want in quality and pack. This society has done more good than perhaps any other single factor.

"The demonstration work where a thing is actually performed before farmers, or where one farmer raises alfalfa and then gives results to the meetings of the society, or to persons visiting his farm, has proved to be very successful. We have three meetings of the farmers during the summer to discuss problems that may arise.

"I believe in interesting the boys and girls not in school in producing crops, competing with their fathers or introducing new crops, replanning farm buildings and fields and getting them interested in farm literature.

"Teachers in the country schools do not understand the agricultural books like Warren's and similar texts. Here is an opportunity to explain, outline experiments, and help them in answering questions asked by boys better informed in agriculture than they, as agriculture in the eighth grade is compulsory in this state. I have organized junior clubs in the schools. The purpose of these clubs is to form a social

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Manual Training
Domestic Science
Farmers' Week

Announcement of short courses at the Milaca (Minn.) High School. In this circular a Farmers' Week and a school exhibit are also announced, for the last week of the short course.

nucleus, and each boy carries out some project such as raising corn, and makes an annual report of it. I also give them lists of bulletins useful in their work. I visit these clubs, and if the boys have any questions, I try to answer them and give them any information or help I possibly can.

"I have just started an experiment in a field near the city where a boy is going to raise alfalfa and vetch to demonstrate for farmers entering the city. Another boy is to raise eggplants and potatoes.

"We are now working for a course in farm accounting in the high school, one of the greatest necessities of the farmer. We intend to make a practical course, open to any one in school or out."—CHARLES N. FREY, South Haven (Mich.) High School.

"We have a grange here and in connection with it I have organized a club, the purpose of which is to create a friendly strife in the production of good seed by means of selection, and this is working out finely. At the same time the boys are not only benefiting themselves economically, but are learning that farming is a science. All these things tend to keep them on the farm. Agricultural instruction in a rural community should tend toward this, and when it does not, it is missing the purpose for which it is intended.

"I publish an article at intervals in the local paper addressed to the farmers. In this I try to discuss the problems of the locality in such a way that the farmer can gain some economic benefit by reading it, such topics as these: 'The mixing of fertilizers on the farm'; 'Keeping of farm cost accounts'; 'Directions for pruning and spraying'; 'The necessity of good seed selection'; 'The improvement of the farm pasture,' etc. I have received many letters of appreciation from the farmers in regard to the articles, and inquiries relating to other farm problems.

"Another way in which the instructor can help is in the holding of meetings with the rural school teachers. We have done this here and in

Announcement

or

Rochester Farmers' Short Course and Corn Show

**January 28th
"February 1st
1913**

Rochester, Minnesota

Cover page of Announcement of Rochester (Minn.) High School Farmers' Short Course and Corn Show. The program and list of instructors, including three persons from the State Agricultural College, is given within. A list of premiums for the Corn Show is also given.

this way I get them to teach those things that will help to prepare pupils for my work when they enter the high school.

“As for those above school age, if there is no local grange the instructor should organize an agricultural club of some kind and have it meet at a time suited to the majority of the local people, and in this bring up and find some solution of the local problems. To-day there are in every community some things that are radically wrong and which may be righted if approached (not attacked) in the proper manner.”—R. S. JEFFERS, North Cohocton (N. Y.) High School.

“We have a demonstration plot on which twenty-four experiments, including fertility and cropping system demonstrations, are carried on. The results obtained will be made known to our patrons and people of the district by bulletin or through the local paper.

“We have planned a small nursery in which we shall grow *Catalpa speciosa* stock to be distributed free among the farmers. Later we shall add fruit trees.

“From time to time we publish articles in the local paper, which has a rather wide circulation. These articles are usually written by the students in the agricultural class, following out the line of work being pursued in class work at the time.

“We have taken advantage of the farmers’ institute illustrated lectures sent out, upon request, by the Department of Agriculture, at Washington, D. C. Such lectures, with an accompanying program, are given free, the people of the community being invited to attend.

“Interest has been created in bringing to the school exhibits of farm products, for friendly competition. We propose making more of this next year, calling on the merchants for small prizes, and holding a farmers’ day in connection with the contest.

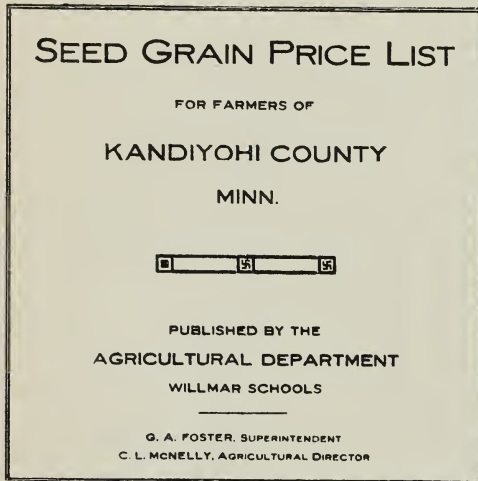
“We make free use of the Babcock tester, testing milk from any part of the region. In the school we also conduct seed corn germination tests and send out information for the conducting of home tests.

“In order to reach students not in school regularly we organize a short course of six weeks, to fit in between fall and spring work. It is our intention next year to wind this up with a week’s instruction for farmers, by the two or three instructors sent out from the state school to do extension work.

“In order to secure another method of approaching the farmer, we are organizing a free township library, to be housed at least temporarily in the high school building. Funds approaching three thousand dollars have been raised by popular subscription. The library will include a number of books on agricultural subjects, to be used at will by the patrons. In connection with the library plan we propose to furnish books for a circulating library for the country schools. Thus we will get our hold there. Our high school graduates are rapidly filling the schools of the neighborhood, in this way aiding us.

“I am encouraging the practice of small experiments in connection with the regular summer work, such as fertilizer tests and cultivation methods for the potato or the tomato, also the corn contests promoted by our congressmen and the publishers of the agricultural magazines.”—O. C. HOSTETLER, Neoga (Ill.) Township High School.

“This high school is in the county which has an agricultural expert, and the high school instructor in agriculture and the county expert co-operate to a large extent in doing extension work.



Title page of List of Local Farmers Having Seed Grain for Sale. Samples of the seed tested by the Willmar (Minn.) High School agricultural department.

“The one thing which we have emphasized more than anything else in the line of extension work is farmers’ meetings, held in the various rural schoolhouses throughout the county. Six months ago Grant County had but one farmers’ club. After a winter of active agitation it now has thirteen healthy farmers’ clubs, holding meetings once every month. After organizing a farmers’ club we always make it a point to be present at the first four or five meetings, at least, to help out in the programs. In fact, it is usually necessary to put on the whole program the first few meetings till the

farmers themselves begin to realize what such a club can mean to their community. From the very start, however, we always try to get them to put something on the program, as we find they will take a greater interest in the club under those conditions and consequently will derive greater benefit from it. If nothing else, the school children can usually be induced to sing a song or two.

“A lantern with an acetylene burner, the gas being supplied from an ordinary automobile prestolite tank, furnishes excellent light for projecting pictures on the screen, and we find that by using this we can make the programs not only very entertaining but also more instructive than a mere unillustrated talk would be. The domestic science teacher, who has assisted us very ably in this work, also usually gives several musical selections in addition to her regular talk or demonstration. Our main purpose is to give instruction, but we find that if we can provide some entertainment at the same time and give the more serious part of the program in an interesting way our work will be more effective and furthermore we will get larger crowds. The average attendance at these meetings is about 50 to 60, but we have had as high as 115 at a single rural schoolhouse meeting. During the past winter the agricultural instructor gave talks at some forty of these meetings. While the agricultural instructor attended nearly all the meetings held, the preliminary arrangements, such as getting the consent of the school board to use the schoolhouse, advertising the meeting, etc., were done almost entirely by the county expert, who is able to devote all his time to extension work.

“Perhaps I ought to explain how we get our slides for the lantern. Nearly all the large manufacturing establishments dealing with agricultural material have slides which they are glad to loan out for such purposes, but we feel better satisfied with the slides we have made ourselves, of which we have about fifty now and are rapidly adding to the list. Whenever we go out in the country to visit farmers we always carry a camera along and when we come across something that illustrates either some good or bad farm practice we take a picture of it and then make a lantern slide from the film at the high school. We make the slides ourselves, as we can do so at a small expense, and having slides made is almost a prohibitive undertaking when the amount of money for such purposes is limited.

“I have explained this farmers’ club work somewhat in detail, as I feel it is one of the most important lines of work the agricultural teacher can engage in. Among some of our other activities I will merely mention a boys’ seed corn gathering contest, financed by local men; a county acre yield corn-growing contest with \$100 in prizes, open to everybody; identifying weeds and weed seeds; testing milk and cream for fat content; writing farm articles of local and seasonal application for the local paper and testing grain, grass and corn for germination, especially the latter. During the past winter the agricultural instructor tested something like 10,000 ears of seed corn, but this is a line of work which we are going to discourage next year, as it takes a lot of time and is something the farmers can just as well do themselves.”—L. A. HENKE, Elbow Lake (Minn.) High School.

“We have several farmers’ clubs in adjoining school districts as well as one in our school district. I have gone out to several club meetings and given talks during the year. The club of our own district devoted two or three meetings during the past winter to the need of legislation. At one meeting we had our representative in the state legislature here and called his attention to desirable legislation, such as freight rates, poor coal, good roads, seed laws, increasing of state aid to agricultural high schools in the state, and so on. Some of these questions have been brought up before our legislature and bills have been drafted for some of them. Although these things are not directly connected with what is known as “scientific agriculture,” still they are of interest and benefit to the farmer and if the farmer can be helped by this, it is going to increase his faith in his club and make him more wide awake.”—O. B. JESNESS, Winthrop (Minn.) High School.

— LIST OF —

Purebred Live Stock

FOR SALE

BY MEMBERS OF THE

Kandiyohi County Live Stock Breeder's Association

*“THE SIRE IS MORE THAN HALF
THE HERD”*

OFFICERS

J. S. ANDERSON, PRES
S. B. GLADER, VICE PRES
C. L. MCNELLY, SEC
JOHN SWENSON, TREAS

Title page of List of Purebred Live Stock for sale by Local Farmers, with a discussion of the value of a purebred sire. List prepared by the agricultural instructor of the Willmar (Minn.) High School.

“Our most extensive extension work is in the form of lectures given by members of our state college faculty or leading farmers. It stimulates interest in agriculture and also in the school. One man said to me, ‘I have no children and have kicked on the school tax, but I will not do so any more.’ The work has been the cause of many farmers coming to the high school instructor to get milk tested or to ask questions or to get a ration balanced.”—C. L. NASH, Union City (Mich.) High School.

“I am directing a boys’ agricultural club in the county and we have annual exhibits of produce which the boy must have produced himself. Prizes are given which heretofore have been donated by the local merchants, but in the future I shall make an effort to have them contributed by the farmers themselves.”—A. C. McVITTIE, St. John’s (Mich.) High School.

“We are conducting a farmers’ club which meets every Saturday throughout the winter and at which subjects of agricultural interest are discussed by the farmers of the community and occasionally we invite in an expert along some certain line. We also take up a study of the proposed measures before our legislature and keep our representatives acquainted with our desires.

“Every winter a farmers’ short course is conducted in the agricultural room of the schoolhouse for one week, for the farmers of the community. The agricultural college does this as a part of their extension program, furnishing the lecturers for this course. A local fair of large community interest has grown out of a boys’ and girls’ corn club that was started two years ago. An attendance of over 5,000 was reported at the one-day fair last year.”—C. S. LANGDON, Watervliet (Mich.) High School.

“One line of work is the looking up of good herd bulls for those desiring them, learning the names of reliable breeders that have stock for sale of the breed desired, and putting them in touch with the farmer.

“Another line of extension work is the testing of seed corn for the farmers by the ear method, and getting them interested in doing their own testing at home by this method.

“On our school grounds we have an acre patch of alfalfa, seeded last June, which is in a very thrifty condition. I have also gotten two farmers to put in patches of alfalfa, one acre each last year, which is in good condition this year. Alfalfa has not been in very good favor in this community.

“Farmers’ clubs are a great success in many parts of Minnesota, and we are getting a start at it here, usually the farmers of one country school district forming the best-sized club. They are organized for social, educational and pecuniary benefit. Breeders’ clubs, shippers’ clubs, warehouse clubs, etc., all appeal to the farmer.”—A. F. LAURENCE, Norwood-Young America (Minn.) Consolidated Schools

AFTER THE HOLIDAYS, THEN WHAT?

FARMERS SCHOOL

OF COURSE!

JANUARY 6, 7, 8, 9 AND 10

20 - LECTURES - 20

Four Daily at High School Hall.

9:00 a. m. and 1:30 p. m.

3 - SPEAKERS - 3

Mr. W. F. Raven of the M. A. C. Topic---Livestock.

Mr. F. W. Wilken of South Haven. Topic---Horticulture.

Prof. J. O. Linton of the M. A. C. Topic---Poultry.

P R O G R A M

MONDAY - A. M. Improvement of Livestock.
P. M. Feeds and Feeding. Orchard Planting
Cultivation and Fertilization.

TUESDAY - A. M. Pure Bred Sire and Pure Bred Herds.
P. M. Feeds and Feeding. Pruning.
Spraying.

WEDNESDAY - A. M. Cow Care and Cow Comfort.
Grading of Fruit.

P. M. Feeds and Feeding.
Methods of Packing.

THURSDAY - A. M. Silos and Silage. Poultry Breeding.
P. M. Feeds and Feeding. Poultry Feeding.

FRIDAY - A. M. Farmers Choose Topic. Care of Poultry.
P. M. Feeds and Feeding (summary).
Poultry Judging.

Exhibit of Farm Crops in Connection with School.

NO ADMISSION.

Bring Crop Specimens.

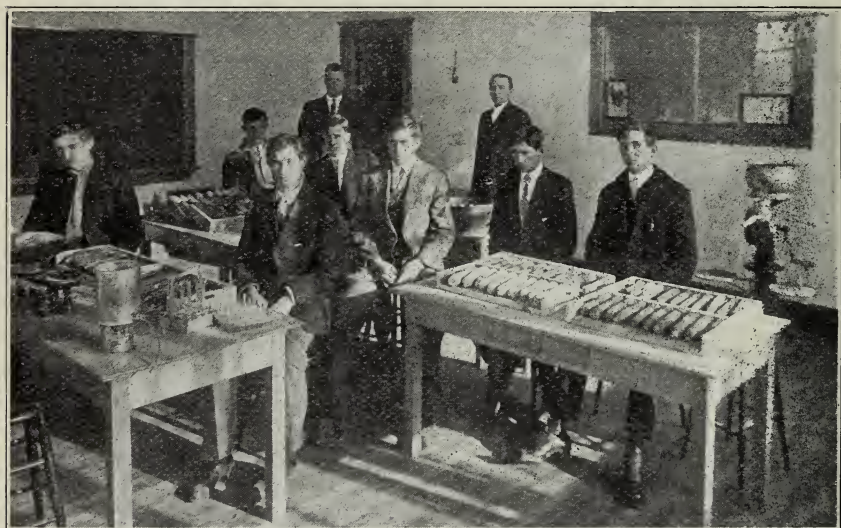
Poultry Show in Town the Same Week.

Announcement of Farmers' Week, Traverse City (Mich.) High School.

“At the outset we found there were two methods of arousing the farmer's interest in the agricultural department of our high school. The first method was by holding farmers' meetings in the rural school houses; and the second method was by visiting the farmers individually.

The visits to the individual farmer were frequently the result of discussions which occurred at the schoolhouse meetings. Following a lecture on such a subject as ‘Treating Grain to Prevent Smut’ or ‘Common Diseases of Live Stock,’ a farmer frequently asked for individual help in such matters. After the confidence of a farmer was obtained by helping him treat his grain for smut or by helping him remedy some condition in his live stock, it was usually an easy matter to get him to try some other progressive measure, such as individual cow testing and feeding balanced rations.

At the present time we are making individual cow tests for eleven farmers. Some of our farmers are sufficiently familiar with the keeping of records to make their own calculations. We make all calculations for those who are not so well posted. The farmer is furnished with



Short course boys in Agricultural Laboratory, Dassel (Minn.) High School.

milk sheets and with the proportions for a balanced ration to be made up from the feeds on his farm as nearly as possible. The farmer sends in to the school each month a sample of milk from each cow, together with a milk sheet showing the weights of milk produced by each cow upon at least three days distributed throughout the month. From the average daily yield of milk and the per cent of butter fat, the output of each cow is determined. After the end of each month a statement is sent to the farmer showing the number of pounds of milk, pounds of butter fat, and the value of butter fat produced by each cow in his herd.

A contest conducted in co-operation with the state food and dairy department has been a means of increasing interest in better methods of dairying. This contest is for adult farmers. It consists of keeping

individual cow records and writing an essay each month on some phase of dairying. The farmers have shown a lasting interest in this contest.

Other ways in which we have been able to serve the adult farmers are the following:

- (a) Germination tests of seed corn.
- (b) Selection of seed corn for breeding plats.
- (c) Tests of small seeds to determine purity and germinability.
- (d) Tests of skim milk to determine skimming efficiency of farm separators.

The most effective form of extension work conducted with the boys of the community has been in the form of a corn-growing contest. In the spring of 1912 we enrolled eighteen boys in the state acre-yield corn contest. These boys obtained yields ranging between 65 and 104 bushels per acre. The results of this contest have stimulated the adult farmers to a greater interest in corn growing.

WORK PROPOSED FOR THE FUTURE.

- (a) Commercial fertilizer tests on the different types of soil in the locality.
- (b) Installation of a plant at the central school for preservative treatment of fence posts.
- (c) Variety tests of oats, wheat, and barley on the farms of the locality.
- (d) Lectures and demonstrations in the rural schools. For this purpose a stereopticon and a motion picture machine will be used."

—L. P. DOYLE, Dassel (Minn.) High School.

"The agricultural department of the Bemidji high school has given considerable time and attention to community and extension work during the two years since it was organized, and, on the whole, with very gratifying results.

"Our extension work may be classified under four heads:

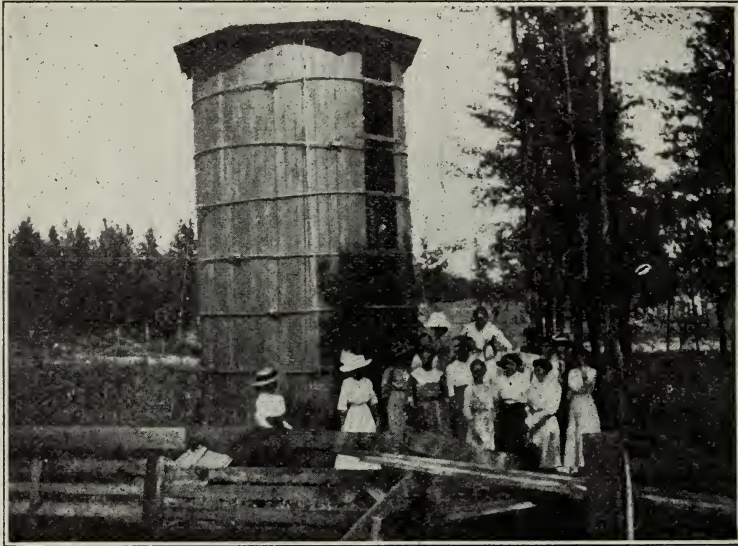
"1. Educational work with pupils attending rural schools, which consists of class work (lectures) and desk work (laboratory work) weekly, semi-monthly, or monthly in rural schools within a radius of 8 or 10 miles from the central high school.

"2. Summer work with children of school age in growing contests in corn, potatoes, tomatoes, etc., on plots of definite size: corn, 1 acre; potatoes, $\frac{1}{4}$ acre; tomatoes, $\frac{1}{20}$ acre.

"3. Farmers' institute work in co-operation with the state institute men.

"4. 'Farmers' organization' work. Here one should be careful not to overreach. Responsibility in this line should be avoided especially in organizations involving capital, for circumstances may easily arise where one of these organizations may monopolize the time and energy of the whole department. Where a committee has implicit confidence in a man they are quick to load upon him both responsibility and work that properly belongs elsewhere. Social and educational organizations can be safely undertaken, but as to industrial organizations, such as co-operative creameries, marketing associations, insurance associations, etc., the department should beware of any closer relations than those of a purely advisory nature. Another line of extension work that may

properly be undertaken with adult farmers is the personal consultation work. We know of no line of work where the right man can be of more immediate benefit and do a more lasting service both to the individual citizen and the community as a whole than in such personal work with the head of the family at home. The following are a few suggestive problems that may be taken up: home improvements in sanitation and practical conveniences; beautifying homesteads; farm drainage; systems of cropping, etc. As far as possible, the head of the agricultural department of the central school should be conversant with the needs and problems of every farm home in his neighborhood.”—OTTO I. BERGH, Bemidji (Minn.) High School.



Summer school class of rural school teachers inspecting silo. Bemidji (Minn.) High School.

“I give talks on agricultural subjects at country schoolhouses during the winter months when the farmer is not very busy. I always have a large crowd of farmers. At some of the meetings I try to have the country teacher give a small program—a scheme to get the parents out. And many a time I have taken the high school boys’ quartet along. At these meetings, I illustrate and demonstrate seed testing and milk testing. Often have I tested milk up to 12 o’clock, and then afterwards driven home seven to eight miles. But in talking to the farmers one must be careful to approach them the right way.

“I have tested every farmer’s seed corn this spring and last spring who brought it in to me. I gave every farmer’s corn the individual ear test, and charged nothing for the work. All that I ask the farmers is to bring and get the corn. Through my efforts we obtained six men to come here for three days to talk to the farmers on the different agricultural subjects. The attendance averaged nearly one hundred farmers. At present I am pushing the boys’ one-acre corn contest among the farmers’ boys. Last fall I had a seed corn gathering con-

MEETINGS
FOR CREAMERY PATRONS
— ON —
COW
TESTING
— CONDUCTED BY —
WILL FORBES

of Department of Agriculture, Washington, D. C., under
auspices of Director of Agriculture of Glencoe Public Schools.

DATES OF MEETINGS:

Glencoe Central Creamery City Hall, Glencoe, Tues., Oct. 8th, 2:00 p. m.	Sumter Creamery Woodman Hall, Thurs., Oct. 10th, 2:30 p. m.
Glencoe South Station School House, Dist. 45, Sibley Co., Tuesday, October 8th, 8:00 p. m.	Glencoe West Station School House in District 74, Thursday, October 10th, 8:00 p. m.
Plato Creamery Village Hall, Wed., Oct. 9th, 2:30 p. m.	Biscay and Lake Marlon Creamery Biscay School House in District 17 Friday, October 11th, 2:30 p. m.
Bergen Creamery School House in District 19, Wednesday, October 9th, 8:00 p. m.	Koniska Station District 6, Friday, October 11th, 8:00 p. m.

Do Your Cows Pay?

Announcement of meetings for creamery patrons on cow testing.

test in which thirty farm boys competed, the business men giving the premiums.

“For the boys and girls not attending school we have contests, as corn growing, tomato growing contests, etc. Have them form library societies and have them meet at regular intervals. Encourage them to stay on the farm. Conduct a three months’ short course during the winter months and encourage them to attend. We give one here every winter. The domestic science teacher has given a few talks at the country schools, and we have invited all the women to the school, where they were served by the high school cooking class.”—ALBERT WEISS, Granite Falls (Minn.) High School.

“During the last two years the high school has tested 230 bushels of seed corn. Of this amount more than 100 bushels was brought in by



Seed corn test, 3,600 ears. Fergus Falls (Minn.) High School.

farmers. We tested corn free for one year in order to demonstrate the value of it, after which a charge of fifty cents per bushel was made. The fact that this charge was made did not materially reduce the amount of corn brought in this year. We have many calls from farmers to have the purity of their seeds determined. We usually have the high school students make these tests, but the results are always verified before they are sent out.

“This year we started testing cows for farmers. Our plan is to have the farmer enter in an agreement with the school in which he obligates himself to buy a milk scale, sample bottles, and weigh the milk daily, and once each month bring a sample to the high school where the butter fat test is made for him. We started with fifty-five cows and in three months the work had grown so that more than two hundred cows are now tested monthly.

“Each year we have a week for farmers and their families. This is a school rather than an institute. Definite lines of study are taken up.

This year we limit ourselves to corn and dairying. The instructors for the week are sent out by the extension division of the state university.” —J. E. METZGER, Fergus Falls (Minn.) High School.

“The work that can be carried on in any community would be milk testing, encouraging and showing the farmers that certain cows are ‘boarders,’ tuberculin testing, especially where milk is sold by the quart, feeding experiments, growing of clover, alfalfa or leguminous crops, better corn, drainage, liming soils, intelligent buying and use of commercial fertilizers, breeding of animals, spraying of fruits, treating grains for smut, and management of farms. Of course the above can not all be accomplished in one year, as the farmer must be shown before he will change. I find that the farmers have had too much advice from the ‘platform’ and are demanding us to give facts and figures. I have been here two years and now my work in the community is taking root. I have men doing some of all of the kinds of work I enumerated, so that I know it can be done.”—T. M. AVERY, Belmont (N. Y.) High School.

“At Grafton, the agricultural teacher is hired for twelve months, with four weeks’ vacation. His work is arranged so that all of his laboratory and recitation work comes in the morning. This leaves his afternoons free for work among the neighboring farmers. It is well understood that he is to be busy all of the time. Every half day must count in some definite way for the good of the school and for the erection of higher ideals in agriculture in this part of the state. For example, during his travels this fall in this neighborhood he made some fifteen short talks in as many country schoolhouses—talks which aroused an interest in his subject and drew the attention of these communities toward the high school as a center of valuable information.

“Whenever he is asked, our agricultural man gives advice on a great variety of subjects to the farmers as he goes about among them, and very often they come to the high school for it also. We have bought a number of dairy cows for them in this way. We judged a young Holstein bull which had just been bought. We selected breeding heifers from a number of dairy herds. We selected suitable plots for alfalfa, potatoes, etc., on a number of farms, and helped plan definite crop rotations. We helped in the planning and construction of several silos also.

“It is the policy of the school to co-operate in every way possible with all other agencies in the community which are trying to forward the cause of good farming. Our local veterinarian calls upon us for help frequently, and it is gladly and freely given. The Department of Agriculture has stationed a federal dairyman in this county, and we are in very close co-operation with him. Our speakers accompany him, upon request, to the meetings he calls throughout this county, and he goes with us when we give our extension programs.

“We are holding extension meetings frequently in the neighboring towns and schoolhouses. In the first five meetings some two hundred and fifty people were reached and permanently benefited. We always took our Victor machine with us, and this, together with a few humorous stories, helped to create a friendly and interested attitude to begin with. The program was quite similar in every case, as the audience was always different. For the town meetings, we had bills printed and

distributed them widely before the time. Our agricultural man talked on some subject of interest to the farmers and tried to give them a new viewpoint for future work. The federal dairyman presented some phase of his work. Boys from the high school classes performed the Babcock test or judged some farm animal. Our teacher of cooking and sewing, with the help of the high school girls, gave talks and demonstrations, and at the close the food was served to those present. These meetings are thoroughly appreciated in every case. For the afternoon meetings, the schools are closed and the buildings turned over to us.

"One extension item which we are planning for the future is a contest among the farmers in three-acre corn and alfalfa plots. The banks and the county commissioners will offer cash prizes and the local dealers certain farm machinery and implements. The contest will close in the fall with a corn and alfalfa congress, which will partake of the nature of an institute with especial emphasis upon these two farm products and the problems connected with them."—E. L. WHITNEY, Superintendent of City Schools, Grafton (N. D.).

"I have spent practically all my spare time on pruning and spraying fruit trees. I have double the work to do this year that I had last year, and in most cases I spray for the same farmers every fall and spring. With two barrel pumps and school boys who get twenty-five cents per hour for work out of school hours, I have pruned and sprayed over 600 trees belonging to farmers who asked me to do the work for them. The agricultural boys have equaled this number on their own farms. I expect to drum up this one phase of community work until the fruit trees in Hadley are put on a paying basis. Results are what I am after, not talk or advertising of a yellow journal style, that I feel is injuring agriculture more than all the failures ever did.

"I think the agricultural teachers are being given too much to do by people not familiar with farmers and farm work, and as a result something must slide. I have only twelve boys, but twelve keep me busy. I visit their homes and see that they practice what I preach. I suggest to them while visiting, I meet their parents, see the boy's home conditions, what he is up against, and that to me is more than all the literature on 'How to make \$5,000 a year with six months' vacation' that could be read by the boys during school hours. The boys take up one home project at least, running from poultry to orchards, bees to kitchen garden or dairying. They pick their project and apply all the science and common sense available to the project.

"I have placed three co-operative fertilizer demonstrations in distant parts of Hadley, and think this showing, or demonstration, means more to the average farmer than all the talking does."—E. F. BURKE, Hopkins Academy, Hadley (Mass.).

"Through our agricultural department many farmers were able to co-operate on the purchasing of silos, with a saving of nearly \$100 on each silo bought. A grain breeders' association was organized; three contests were held—a tomato growing contest for girls, an acre growing contest in corn for boys, and a seed gathering contest held Friday afternoon, September 20th. In this latter contest forty boys took part, working hard for one hour in selecting the best ten ears from a field of good corn. The prizes were awarded upon the merits of the ten ears

selected after all the samples had been properly dried. Twenty prizes were awarded in this contest.

"An industrial contest like those that have been carried out during the past year is not for the purpose of distributing money. The object of this work is to stimulate interest in the general duties about the farm and home. So many boys and girls are brought up in the country in touch with the affairs of the farm and home and never learn to know or understand them simply because their attention has not been called to these things. Once they are interested and encouraged to do their best they see that there is in reality a great deal to the things they have considered so simple. When they realize that there is a good and a poor way to do things and that real skill and knowledge are required to do them well, they see that these plain tasks are really worthy and require their best efforts.

"Contests will be conducted this coming year. One new contest that is certain of being introduced is a 'five acre contest in corn' for the farmers. Since the boys did so well in their one acre, it will be interesting to find out whether the older men can do as well on five acres with special care and attention. Several farmers have already signified their intention of entering such a contest."—D. MEADE, Hector (Minn.) High School.

Conclusions.

It must be evident to any one who has read the preceding pages, that community service in agriculture by the agricultural departments of public high schools is no untried theory, of doubtful value in practice. The benefits of agricultural local extension work have been demonstrated by many workers, in many places. Properly conducted, it promotes agricultural knowledge, prosperity, and community spirit among farmers; vitalizes and emphasizes the value of school instruction; and, not least important, furnishes a useful avenue through which the agricultural experiment station may both keep in close touch with farm conditions and needs and disseminate the results of its investigations.

It is impossible to state what will prove to be the most helpful lines of community work in any given case without a knowledge of local conditions and needs. But among the kinds found effective and mentioned as most promising by correspondents teaching agriculture in the high schools of many states are: Short courses for boys and girls over school age; farmers' week for farmers and for farmers' wives; farmers' institutes in co-operation with state farmers' institute workers, or in co-operation with persons representing the state agricultural college; visiting farms and talking over farming problems with farmers; rural schoolhouse meetings for farmers, with talks on agriculture, domestic science and rural problems, enlivened by music, recitations, lantern slides, etc.; organization of, or work with, farmers' clubs for definite purposes, as the breeding of cattle, horse breeding, cow testing, co-operative marketing and buying, co-operative laundry, etc.; inducing individual farmers to keep cost and yield records, helping in balancing

rations, suggesting improvements in rotations, testing milk, seeds, etc.; distributing good seed; demonstrations of agricultural practices, as pruning, spraying, the use of hog cholera serum, etc., either at the school farm or at farms of the community; calls in response to requests to inspect sick stock, diseased grain or trees; demonstration plots on the school farm and co-operative demonstrative plots on farms of the community; inducing farm boys to take up "special projects" in farming; promoting the teaching of agriculture and domestic science in rural schools by means of annual short courses for rural teachers or monthly Saturday lectures; visiting rural schools and helping rural school teachers in planning and carrying on agricultural work with pupils; organization of boys' and girls' clubs; getting up local contests, fairs, "corn days" and the like; furnishing plans for kitchen gardens, for rotation schemes; issuing of school agricultural bulletins on timely topics; occasional agricultural items in local papers; issuing an agricultural supplement to local papers at regular intervals; establishing a circulating agricultural library for farmers; helping a few leading farmers to organize their business so that full records and accounts shall be kept, that future accurate deductions may be made as to legitimate production costs; listing farmers' "for sale" and "want" items at school building, or in published lists to be distributed.

Before attempting community work the teacher must first study conditions and needs, review his resources in time and money, and then select the lines of work which promise to be most helpful and successful. The first step is to get acquainted with the farmers and their problems and to win their confidence. Make haste slowly. Do not attempt too much. Do well what is undertaken. Secure the co-operation of the more progressive farmers. Do more demonstrating than talking. Avoid a superior or dictatorial attitude. And keep working.

Difficulties will be encountered, it is true. There may be no financial support for the work, no time allotted for carrying it on, no provision for getting to and from farms. The teacher's school work may be heavy. The farmers may not respond readily to the efforts of the teacher. They may be skeptical as to the value of his suggestions.

But these difficulties need not dismay the right kind of agricultural teacher. If he is properly trained for his work in the high school he need not fear failure. Any agricultural teacher who is really qualified to give agricultural courses in a high school—whose training has included thorough grounding in the elementary principles of science, a detailed technical study of agriculture, and a certain amount of training in farm practice—can do more or less community work. Good training in English and public speaking will be of advantage to him. Knowledge of rural sociology and agricultural economics will be of great

value. Keen sympathy with and understanding of community needs and welfare is essential.

It is desirable, for the successful carrying on of agricultural community work, that adequate allowance of time be made the teacher for it, his classroom work being limited, preferably, to one half of each day. Financial support, means of getting around the country to farm homes, and means for carrying on needed lines of work, are most desirable. The retaining of the same agricultural teacher for several years by the school board is an advantage. But a beginning for local extension work can be made even under very unfavorable circumstances, and, as the work proves its value, time and support for it will come, together with increased opportunities for service.

